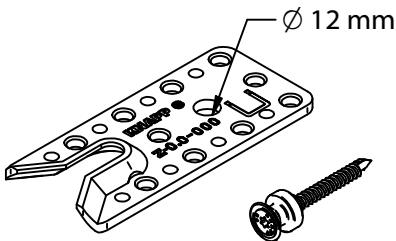


## RICON® S 140/60 VK12

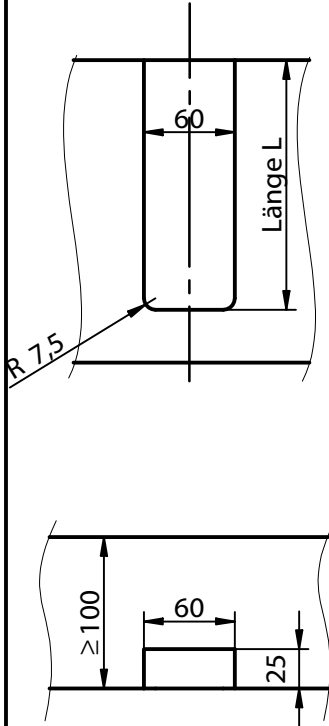
Verschraubter Kragenbolzen

Ausfräsung im Hauptträger

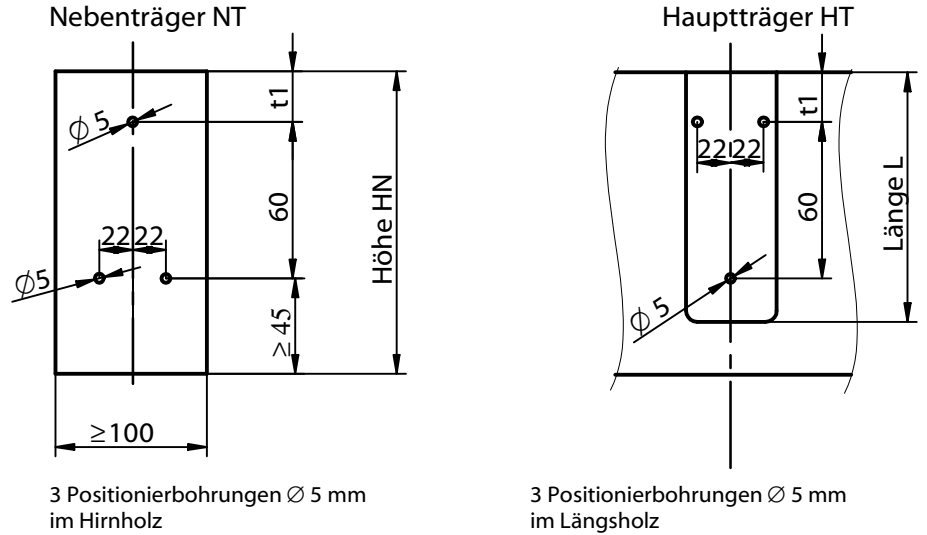


Art. Nr. K130

### 1. Fräsen

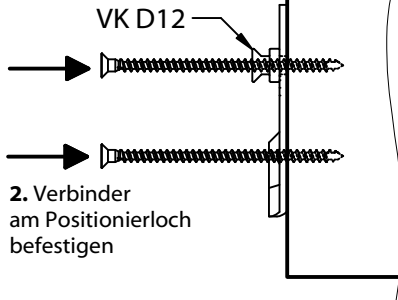


### 2. Bohrungen



### 3. Verschrauben

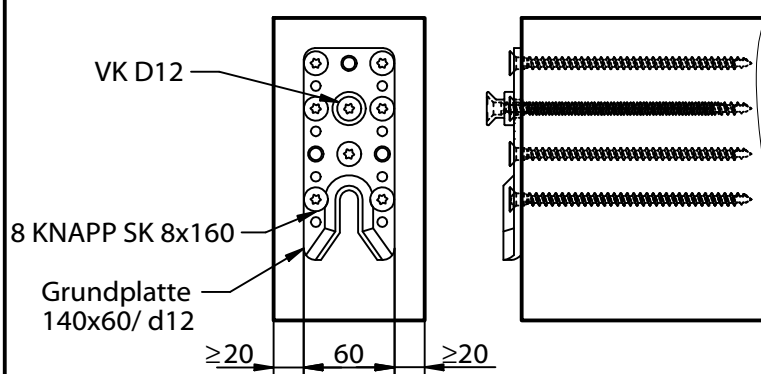
1. Kragenbolzen mit Schraube und Verbinder am Positionierloch befestigen



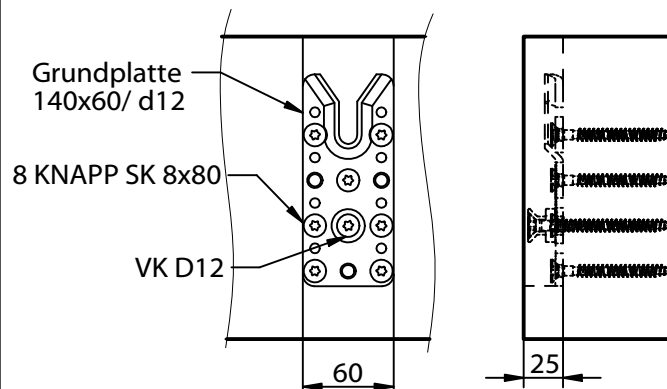
2. Verbinder am Positionierloch befestigen

3. Selbstbohrende Schrauben lt. Schraubenbild (siehe rechts) eindrehen

#### Befestigung im Nebenträger NT



#### Befestigung im Hauptträger HT



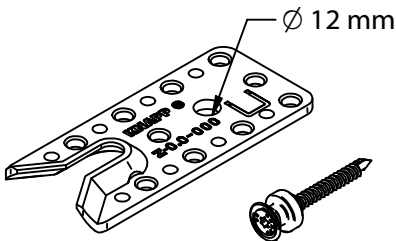
## RICON® S 140/60 VK12

Verschraubter Kragenbolzen



Ausfräsung im Hauptträger

ETA-10/0189



Art. Nr. K130

### Einfräslängen L im Hauptträger

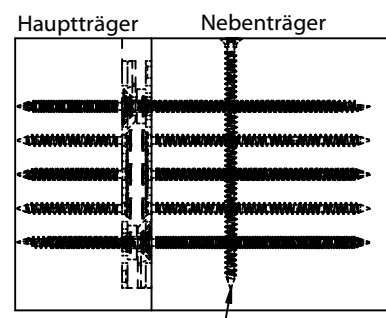
Einfräslänge L im Hauptträger ohne Querszugverstärkung in Abhängigkeit der Nebenträgerhöhe HN				
Nebenträger- höhe HN	RICON S 140x60	RICON S 170x60	RICON S 200x60	RICON S 230x60
	Länge L ohne Verstärkung	Länge L ohne Verstärkung	Länge L ohne Verstärkung	Länge L ohne Verstärkung
[mm]	[mm]	[mm]	[mm]	[mm]
160	155			
180	170	-	-	-
200	180	180	-	-
220	200	200	-	-
240	210	210	210	-
260	-	220	220	-
280	-	-	240	240
300	-	-	250	250
320	-	-	-	265
360	-	-	-	300

### Einbohrmaße im Haupt- und Nebenträger

Einbohrmaße t <sub>1</sub> im Haupt- und Nebenträger in Abhängigkeit der Nebenträgerhöhe HN				
Nebenträger- höhe HN	RICON S 140x60	RICON S 170x60	RICON S 200x60	RICON S 230x60
	Einbohrmaße t <sub>1</sub> im Nebenträger			
Abstand t <sub>1</sub>	Abstand t <sub>1</sub>	Abstand t <sub>1</sub>	Abstand t <sub>1</sub>	Abstand t <sub>1</sub>
[mm]	[mm]	[mm]	[mm]	[mm]
160	55			
180	70			
200	80	50		
220	100	70		
240	110	80	50	
260		90	60	
280			80	50
300			90	60
320				75
360				110

#### Wichtiger Hinweis:

Sollten geringere Nebenträgerhöhen verwendet werden, muss vom Statiker ein Querszugnachweis durchgeführt werden. Der Querschnitt kann mit Vollgewindeschrauben querszugverstärkt werden, die vom Statiker zu bemessen sind (DIN 1052 , 11.4.3 / EN 1995-1-1, NAD) !

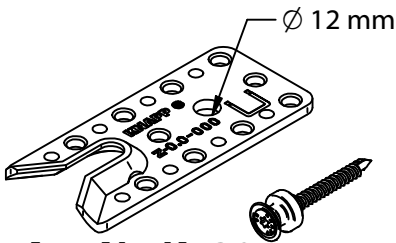


Selbstbohrende Vollgewindeschrauben zur Querszugverstärkung des Nebenträgers

## RICON® S 140/60 VK12

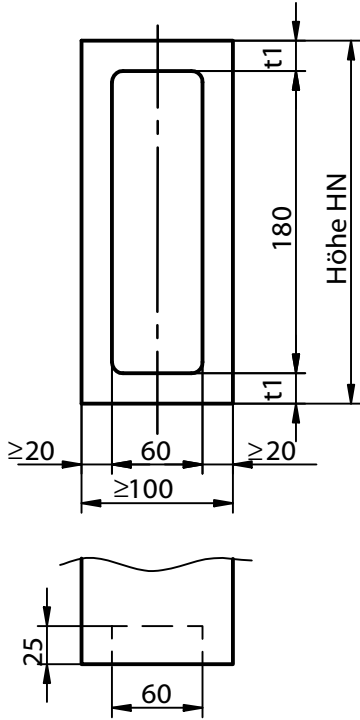
Verschraubter Kragenbolzen

Ausfräsung im Nebenträger

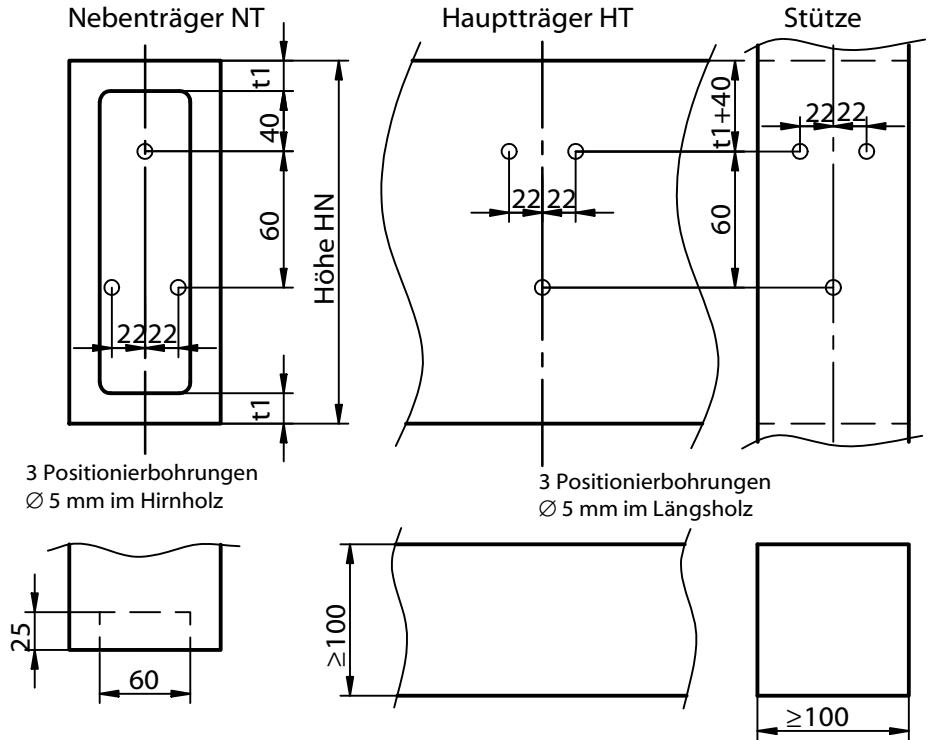


Art. Nr. K130

### 1. Fräsen

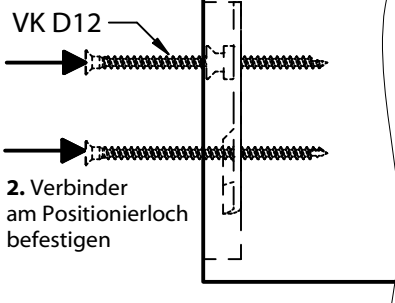


### 2. Bohrungen



### 3. Verschrauben

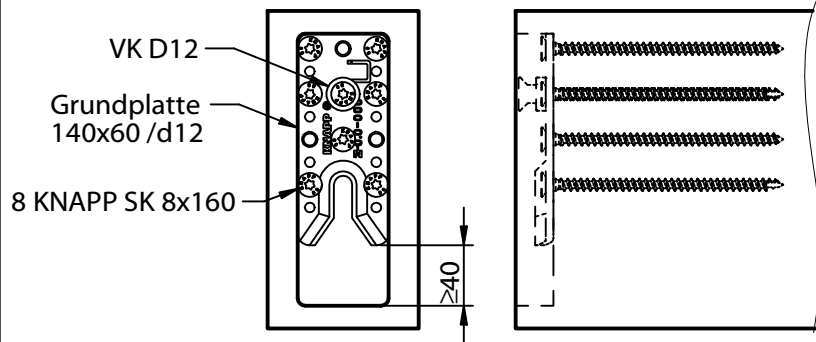
1. Kragenbolzen mit Schraube und Verbinder am Positionierloch befestigen



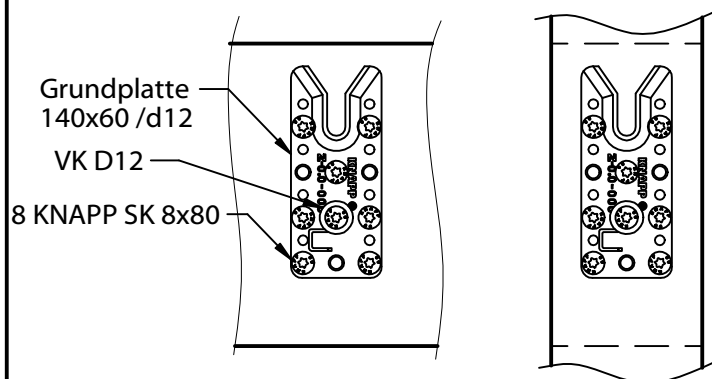
2. Verbinder am Positionierloch befestigen

3. Selbstbohrende Schrauben lt. Schraubenbild (siehe rechts) eindrehen

#### Befestigung im Nebenträger NT



#### Befestigung im Hauptträger HT und Stütze

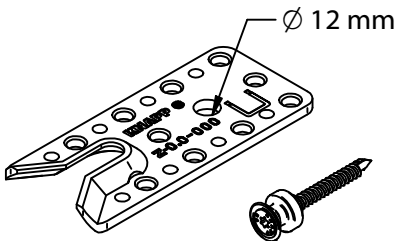


## RICON® S 140/60 VK12

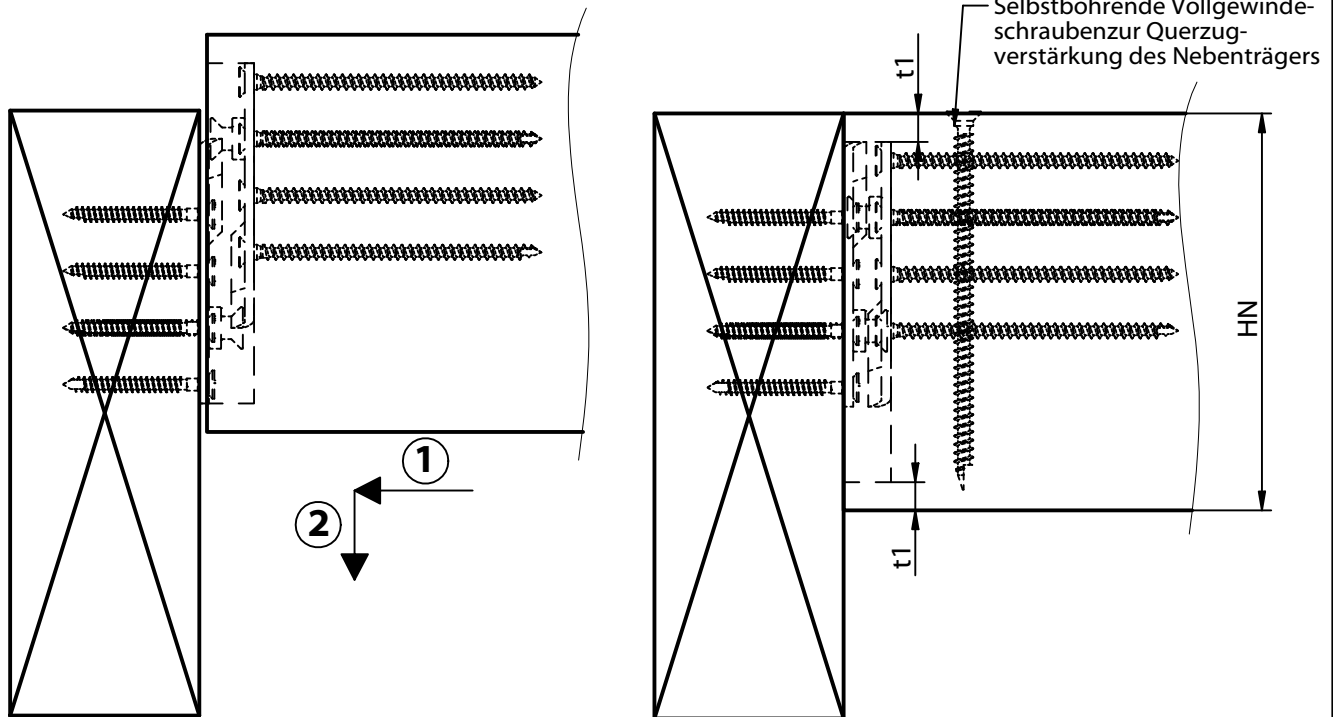
Verschraubter Kragenbolzen

Ausfräsung im Nebenträger

CE  
ETA-10/0189



Art. Nr. K130

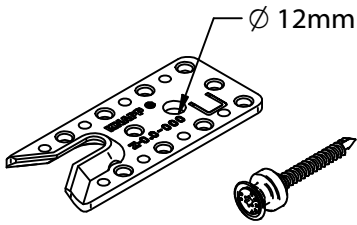


Randabstände  $t_1$  in Abhängigkeit der Nebenträgerhöhe  $HN$  und der RICON® S Größe

Nebenträger- höhe HN [mm]	Randabstand $t_1$ in Abhängigkeit der Nebenträgerhöhe $HN$			
	RICON S 140x60 Abstand $t_1$ [mm]	RICON S 170x60 Abstand $t_1$ [mm]	RICON S 200x60 Abstand $t_1$ [mm]	RICON S 230x60 Abstand $t_1$ [mm]
200	10	-	-	-
220	20	-	-	-
240	30	15	-	-
260	-	25	10	-
280	-	35	20	-
300	-	-	30	15
320	-	-	40	25
340	-	-	-	35
360	-	-	-	45

### Wichtiger Hinweis:

Sollten geringere Nebenträgerhöhen verwendet werden, muss vom Statiker ein Querkugnachweis durchgeführt werden. Der Querschnitt kann mit Vollgewindeschrauben querkugverstärkt werden, die vom Statiker zu bemessen sind (DIN 1052, 11.4.3 / EN 1995-1-1, NAD)!



# Construction Manual

## RICON® S 140/60 VK12

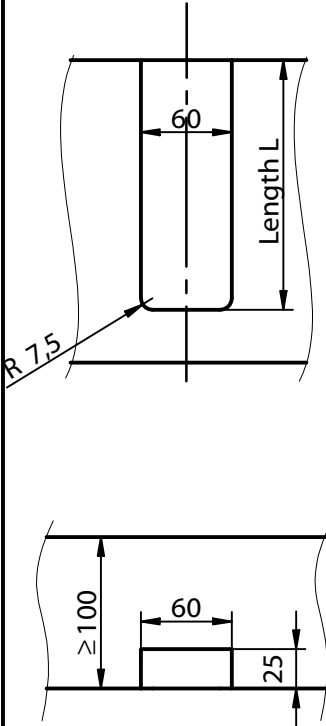
Screwed collar bolt



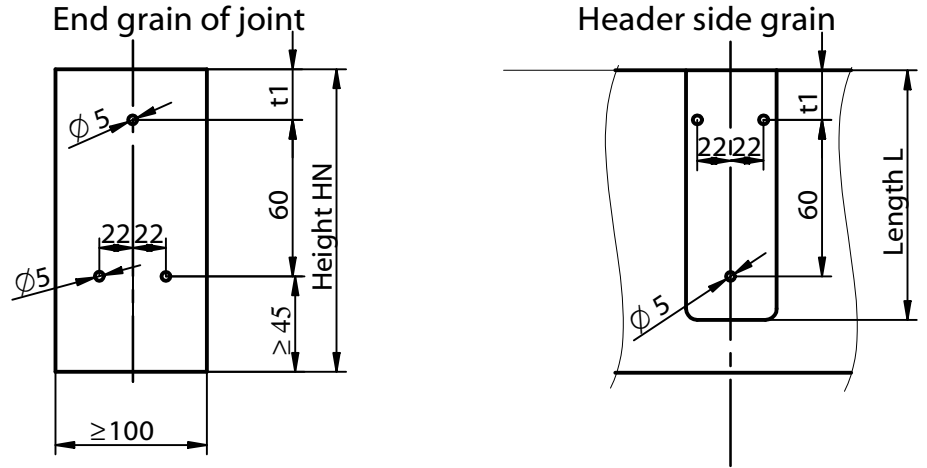
Art. No. K130

### Machined edge of the header

#### 1. Machined edge



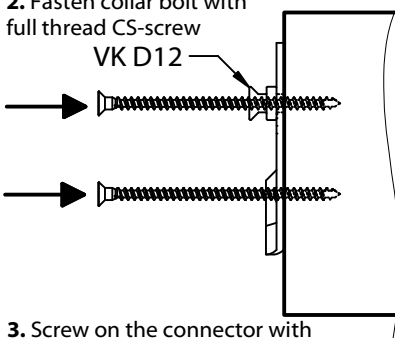
#### 2. Drilling template



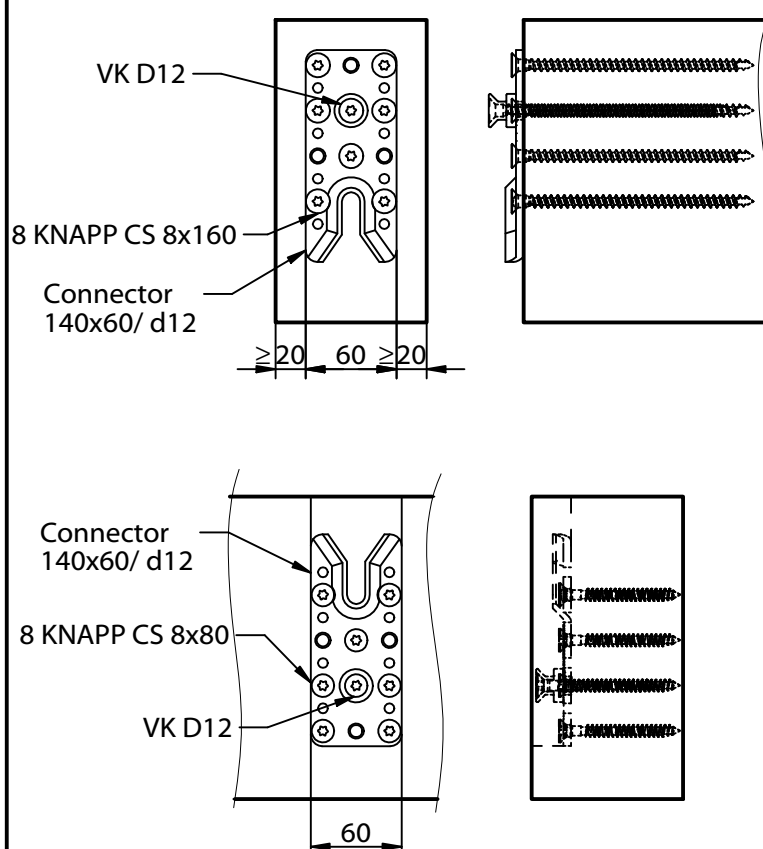
Version VK:  
Bore 3 holes:  
Diameter: 5 mm  
Depth: 50 mm

#### 3. Screwing:

1. Position collar bolt into the hole provided
2. Fasten collar bolt with full thread CS-screw VK D12

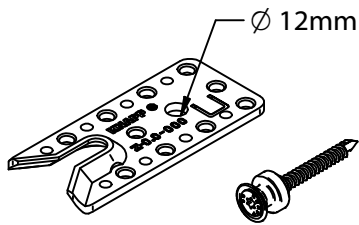


3. Screw on the connector with KNAPP CS-screws according to the screw picture



This drawing is the exclusive property of Knapp GmbH.

© Knapp GmbH. All measures in mm - Errors excepted. VERSION 02 10.09.2012



# Construction Manual

## RICON® S 140/60 VK12

Screwed collar bolt



Art. No. K130

**Machined edge of the header**

Rabbit length L for header without lateral tension reinforcement in reference of the height HN of the joint

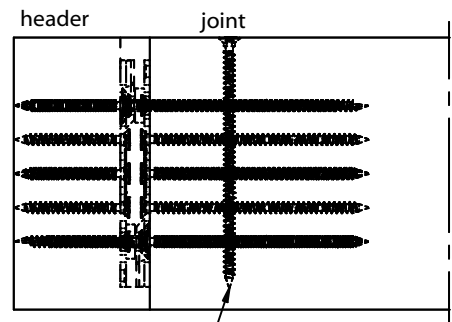
Joint height HN [mm]	RICON S 140x60	RICON S 170x60	RICON S 200x60	RICON S 230x60
	Length L without lateral tension reinforcement [mm]	Length L without lateral tension reinforcement [mm]	Length L without lateral tension reinforcement [mm]	Length L without lateral tension reinforcement [mm]
160	155	-	-	-
180	170	-	-	-
200	180	180	-	-
220	200	200	-	-
240	210	210	210	-
260	-	220	220	-
280	-	-	240	240
300	-	-	250	250
320	-	-	-	265
360	-	-	-	300

Bore measure  $t_1$  for header and joint in reference to the height HN of the joint

Joint height HN [mm]	RICON S 140x60	RICON S 170x60	RICON S 200x60	RICON S 230x60
	Bore measure $t_1$ for joint			
	Distance $t_1$ [mm]	Distance $t_1$ [mm]	Distance $t_1$ [mm]	Distance $t_1$ [mm]
160	55	-	-	-
180	70	-	-	-
200	80	50	-	-
220	100	70	-	-
240	110	80	50	-
260	-	90	60	-
280	-	-	80	50
300	-	-	90	60
320	-	-	-	75
360	-	-	-	110

### Important Information:

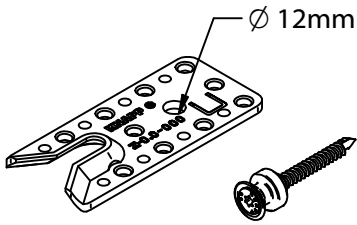
If you use smaller joint dimensions, please contact a structural engineer, who has to proof the tensile strength perpendicular to the grain (EN1995-1-1 and NA). Full thread screws with cut point can be used for lateral tension reinforcement of the joint.



Full-thread screw with cut point for lateral tension reinforcement of joint

This drawing is the exclusive property of Knapp GmbH.

© Knapp GmbH. All measures in mm - Errors excepted. VERSION 02 10.09.2012



# Construction Manual

## RICON® S 140/60 VK12

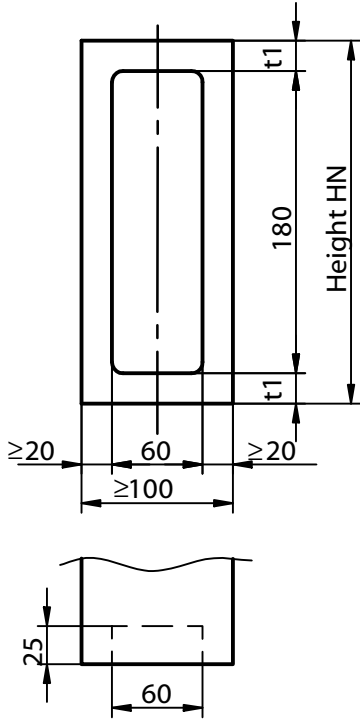
Screwed collar bolt

### Machined edge of the joint

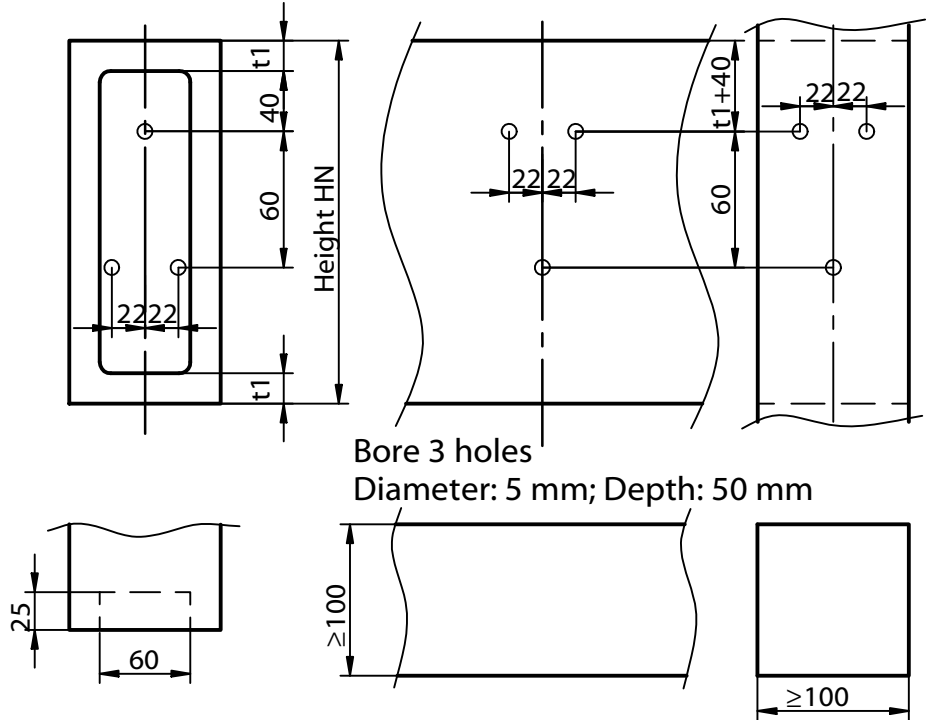


Art. No. K130

### 1. Machined edge

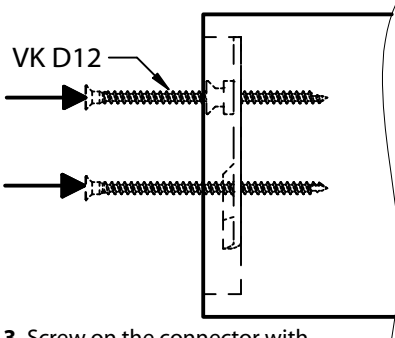


### 2. Drilling template

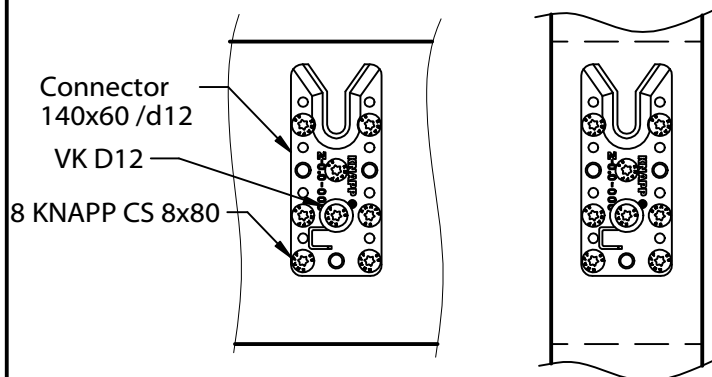
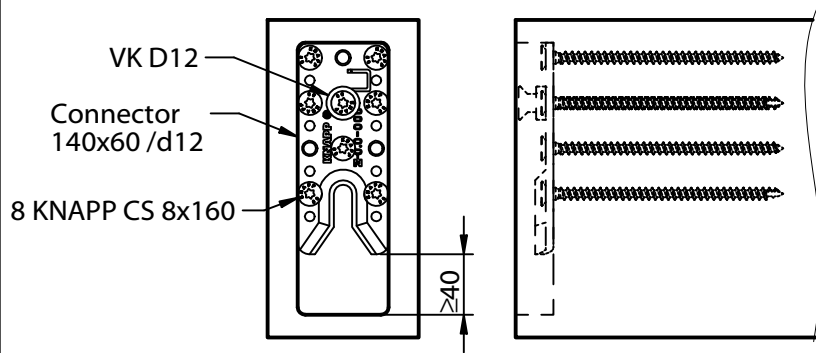


### 3. Screwing:

1. Position collar bolt into the hole provided
2. Fasten collar bolt with full thread CS-screw

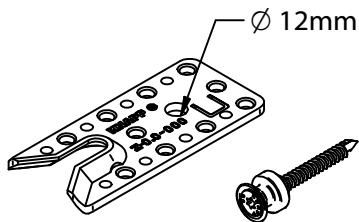


3. Screw on the connector with KNAPP CS-screws according to the screw picture



This drawing is the exclusive property of Knapp GmbH.

© Knapp GmbH. All measures in mm - Errors excepted. VERSION 02 10.09.2012



# Construction Manual

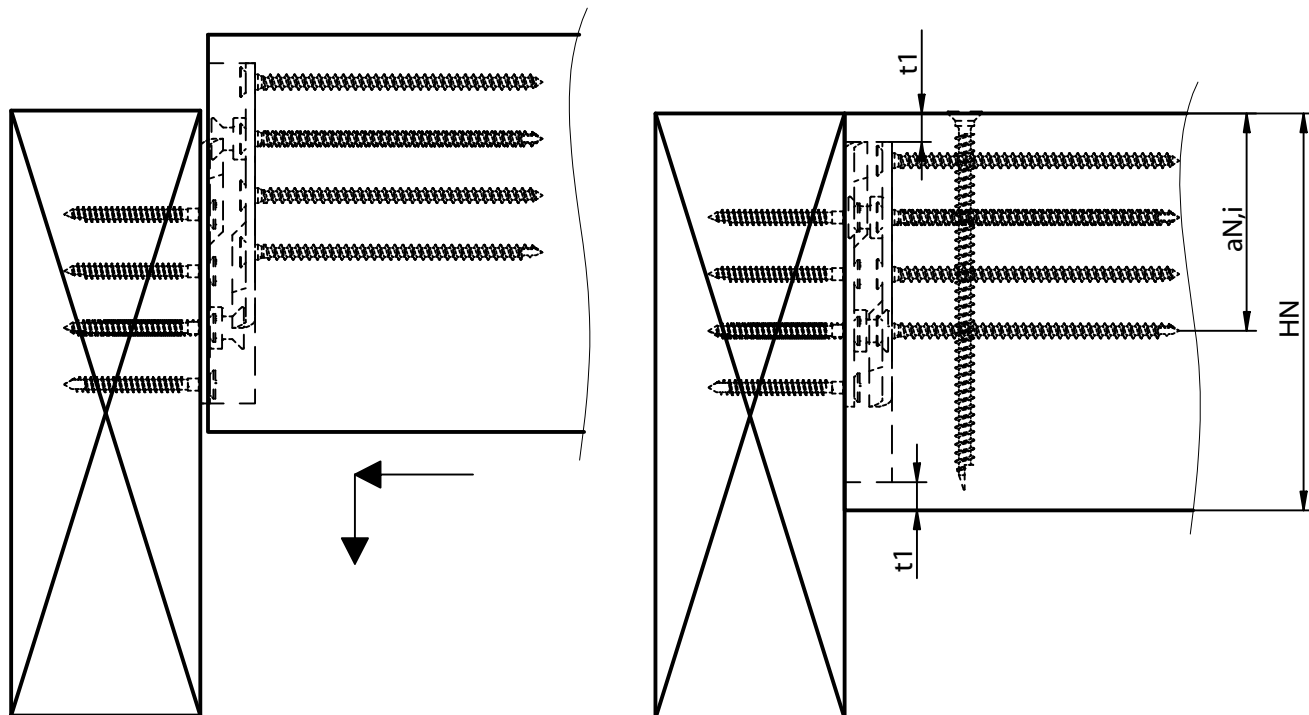
## RICON® S 140/60 VK12

Screwed collar bolt



Art. No. K130

Machined edge of the joint

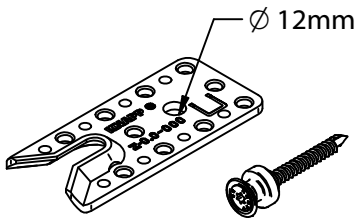


Secondary beam height HN	Edge distance $t_1$ in reference of the height $H_N$ of the secondary beam			
	RICON S 140x60	RICON S 170x60	RICON S 200x60	RICON S 230x60
[mm]	Distance $t_1$ [mm]	Distance $t_1$ [mm]	Distance $t_1$ [mm]	Distance $t_1$ [mm]
200	10	-	-	-
220	20	-	-	-
240	30	15	-	-
260	-	25	10	-
280	-	35	20	-
300	-	-	30	15
320	-	-	40	25
340	-	-	-	35
360	-	-	-	45

### Important Information:

Provided that  $a_{N,i} > 0,7 H_N$  or the splitting of the ancillary load bearing element is prevented by a transverse tension reinforcement element with self-sinking full-thread screws in accordance with general construction supervisory approval, the proof of transverse tension on ancillary load-bearing members may be waived. Please contact a structural engineer, who has to proof the tensile strength perpendicular to the grain (see ConstructionSupervisory Approval Z-9.1-698).





# Notice de montage RICON® S 140/60 VK12

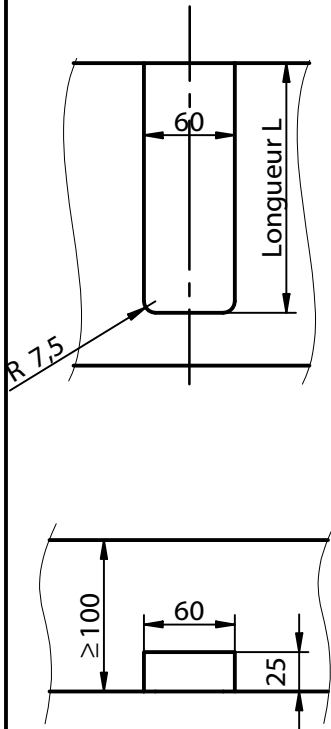
Pièce d'accroche vissée



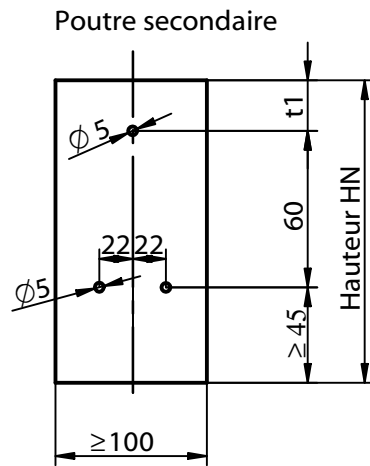
Réf. K130

## Encastrement sur la poutre principale

### 1. Fraiser

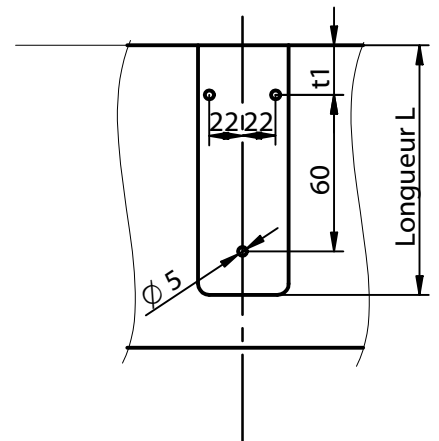


### 2. Percer



3 perçages de position  $\varnothing 5$  mm sur bois de bout

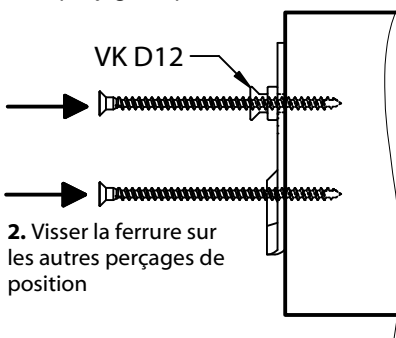
### Poutre principale



3 perçage de position  $\varnothing 5$  mm sur bois de fil

### 3. Visser

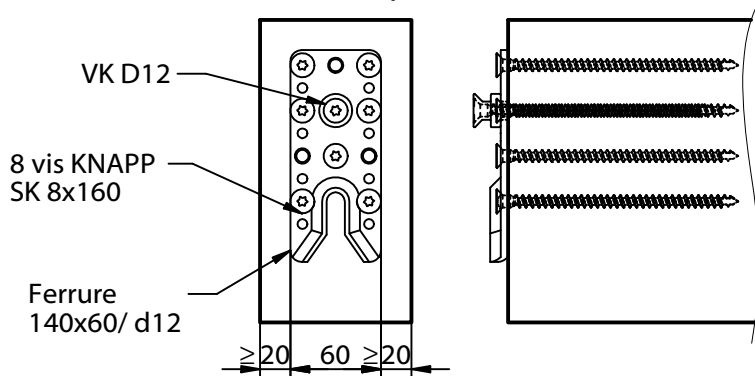
1. Fixer la ferrure avec la pièce d'accroche et sa vis sur le perçage de position



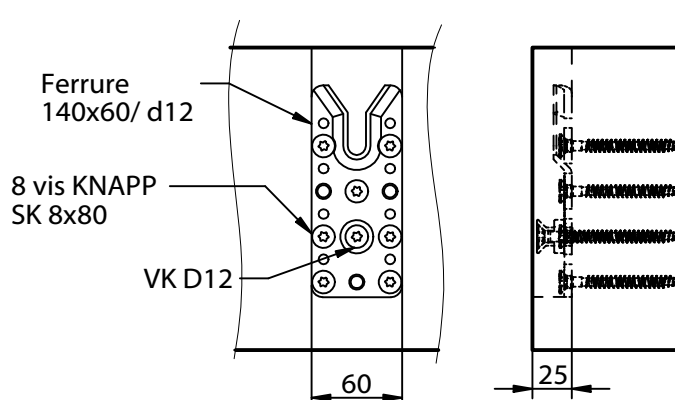
2. Visser la ferrure sur les autres perçages de position

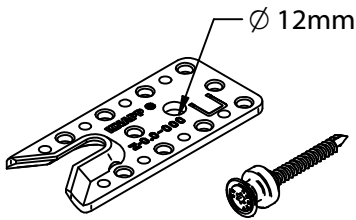
3. Visser le reste des vis suivant le schéma (cf. dessins à droite)

### Fixation sur la poutre secondaire



### Fixation sur la poutre principale





### Longueur de fraisage L dans la poutre principale

Longueur de fraisage L dans la poutre principale sans vissage de renfort traversant, en relation avec la hauteur de poutre secondaire  $H_N$

Hauteur de poutre secondaire $H_N$ [mm]	RICON S 140x60	RICON S 170x60	RICON S 200x60	RICON S 230x60
	Longueur L sans renfort [mm]	Longueur L sans renfort [mm]	Longueur L sans renfort [mm]	Longueur L sans renfort [mm]
160	155			
180	170	-	-	-
200	180	180	-	-
220	200	200	-	-
240	210	210	210	-
260	-	220	220	-
280	-	-	240	240
300	-	-	250	250
320	-	-	-	265
360	-	-	-	300

### Position des perçages sur la poutre principale et secondaire

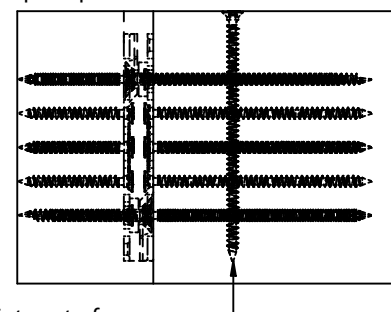
Position de perçages  $t_1$  sur la poutre principale et secondaire en relation avec la hauteur de poutre secondaire  $H_N$

Hauteur de poutre secondaire $H_N$ [mm]	RICON S 140x60	RICON S 170x60	RICON S 200x60	RICON S 230x60
	Position de perçage $t_1$ sur la poutre secondaire			
	Distance $t_1$ [mm]	Distance $t_1$ [mm]	Distance $t_1$ [mm]	Distance $t_1$ [mm]
160	55			
180	70			
200	80	50		
220	100	70		
240	110	80	50	
260		90	60	
280			80	50
300			90	60
320				75
360				110

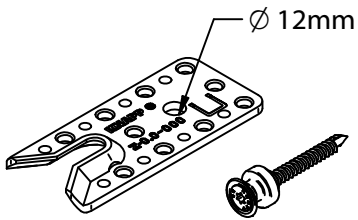
#### Remarque importante:

Faire contrôler par un B.E. compétant dans le cas où la hauteur de la poutre secondaire et plus faible qu'indiqué ci-dessus. Une section plus faible peut être renforcée par des vis de renfort traversantes (EN 1995-1-1, NAD et DIN 1052,11.4.3) !

Poutre principale Poutre secondaire



Vis à filetage total avec pointe auto-foreuse  
Pour le renfort tranchant des poutres secondaires



# Notice de montage RICON® S 140/60 VK12

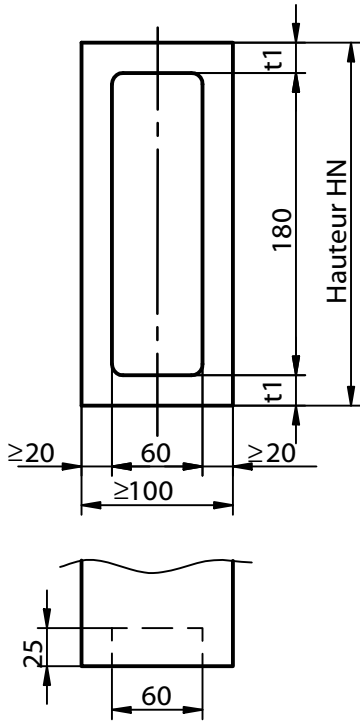
Pièce d'accroche vissée



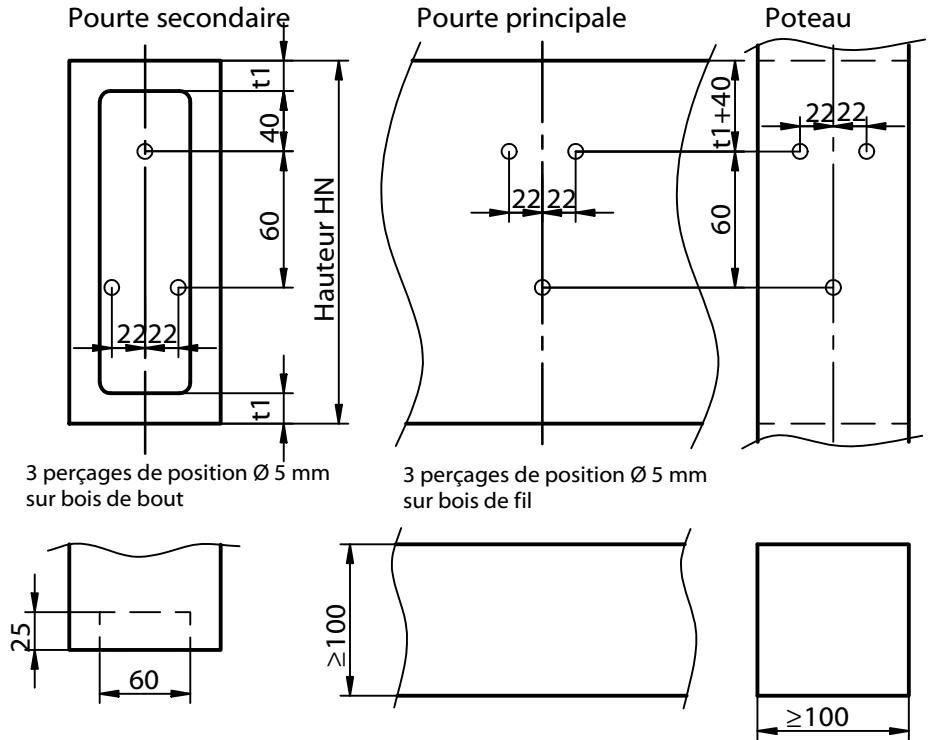
Réf. K130

## Encastrement sur la poutre secondaire

### 1. Fraiser

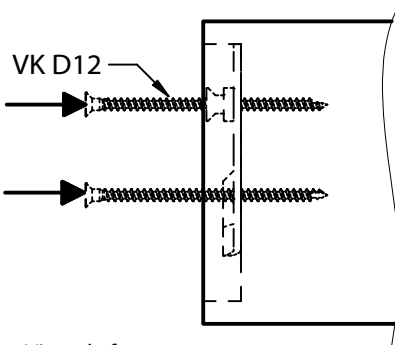


### 2. Percer



### 3. Visser

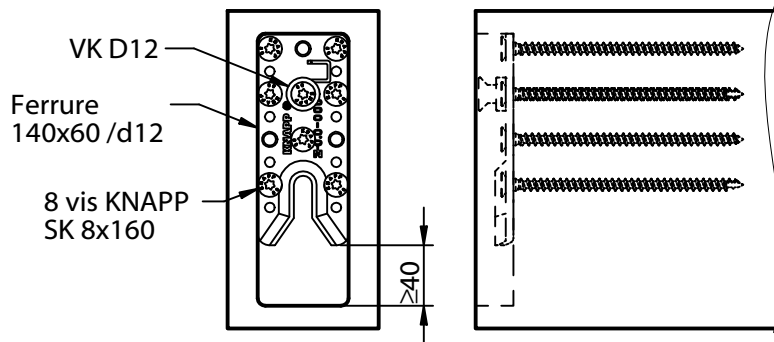
1. Fixer la ferrure avec la pièce d'accroche et sa vis sur le perçage de position



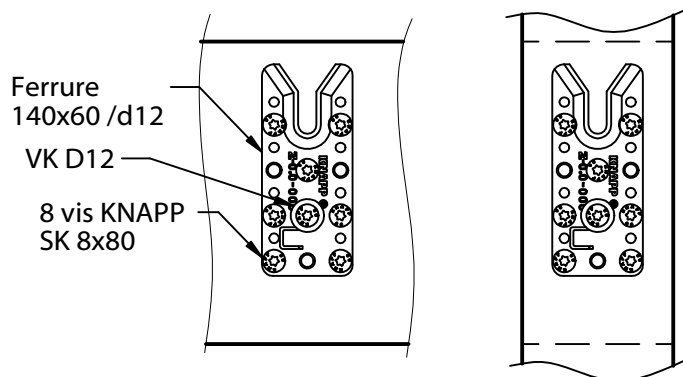
2. Visser la ferrure sur les autres perçages de position

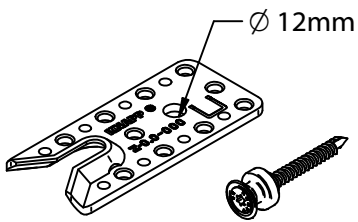
3. Visser le reste des vis suivant le schéma (cf. dessins à droite)

#### Fixation sur la poutre secondaire



#### Fixation sur la poutre principale ou le poteau





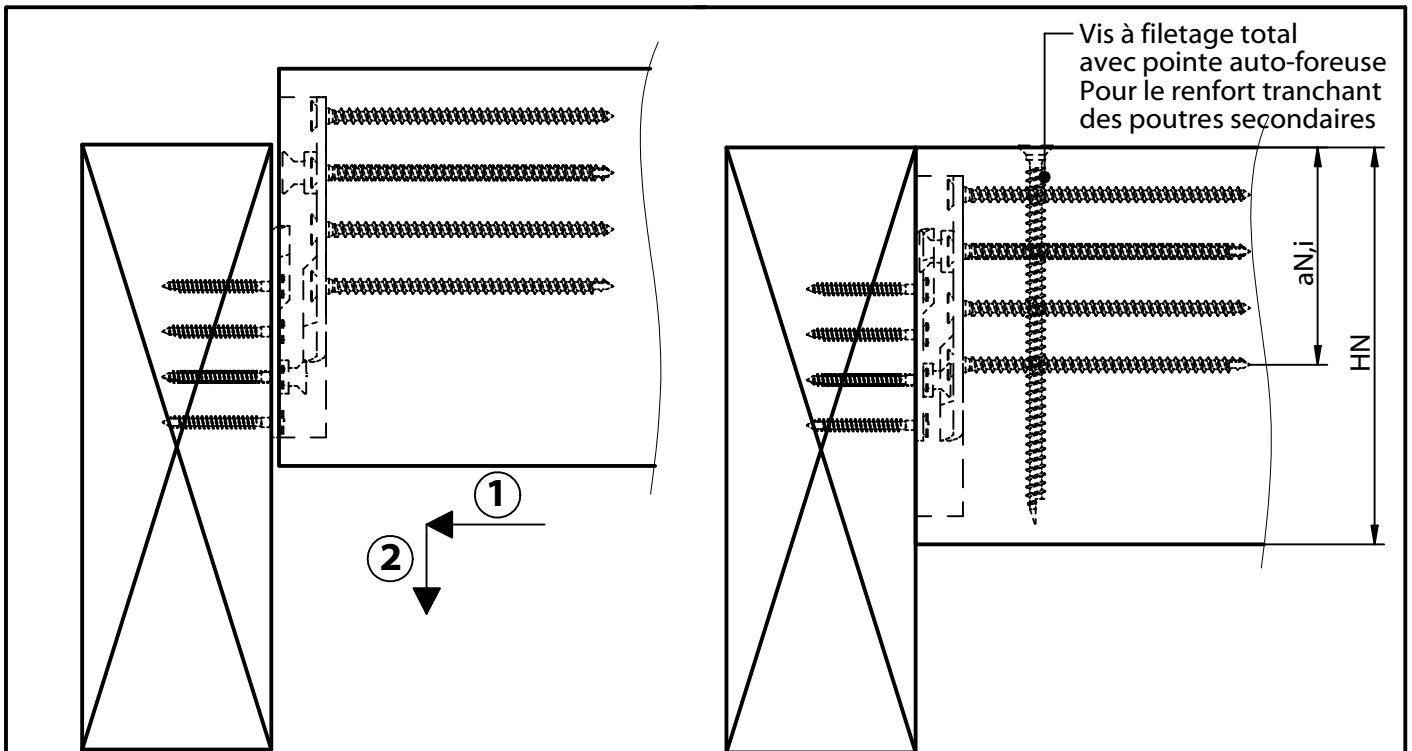
# Notice de montage RICON® S 140/60 VK12

Pièce d'accroche vissée



Réf. K130

Encastrement sur la poutre secondaire



Distance du bord  $t_1$  en relation avec la hauteur de la poutre secondaire  $H_N$  et de la taille de RICON® S

Hauteur de poutre secondaire $H_N$	Distance du bord $t_1$ en relation avec la hauteur de la poutre secondaire $H_N$			
	RICON S 140x60	RICON S 170x60	RICON S 200x60	RICON S 230x60
[mm]	Distance $t_1$ [mm]	Distance $t_1$ [mm]	Distance $t_1$ [mm]	Distance $t_1$ [mm]
200	10	-	-	-
220	20	-	-	-
240	30	15	-	-
260	-	25	10	-
280	-	35	20	-
300	-	-	30	15
320	-	-	40	25
340	-	-	-	35
360	-	-	-	45

**Remarque importante:**

Faire contrôler par un B.E. compétant dans le cas où la hauteur de la poutre secondaire et plus faible qu'indiqué ci-dessus. Une section plus faible peut être renforcée par des vis de renfort traversantes (EN 1995-1-1, NAD et DIN 1052,11.4.3) !